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Internal Financial Management

by

Lucius W. Guernsey

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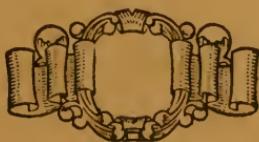


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By  
LUCIUS W. GUERNSEY

Secretary and Controller, Underwood Typewriter Co. Author of Disbursements, Seaboard Air Line Railway, 1900-03. Controller, Hudson River Water Power Co., 1903-06. With Underwood Typewriter Co. 1906 to date.



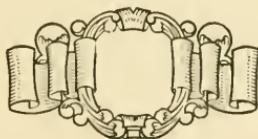
AMERICAN INSTITUTE OF FINANCE



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A  
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IN THE SCIENCE OF  
MAKING MONEY MAKE MORE MONEY

This list is arranged in the order of proper reading. The books are accompanied by a series of test questions, key problems and analyses outlines, enabling the student to apply the knowledge acquired to immediate stock market and investment conditions.

1. <i>Developing Financial Skill</i>	11. <i>Investment Securities</i>
2. <i>Forces Which Make Prices</i>	12. <i>Business Cycles</i>
3. <i>Manipulation and Market Leadership</i>	13. <i>Measuring and Forecasting General Business Conditions</i>
4. <i>Handling a Brokerage Account</i>	14. <i>The Technical Position of the Market</i>
5. <i>Market Information</i>	15. <i>Money and Credit</i>
6. <i>The Essential Features of Securities</i>	16. <i>Business Profits</i>
7. <i>The Value of a Railroad Security</i>	17. <i>Launching a New Enterprise</i>
8. <i>Industrial Securities</i>	18. <i>Securing Capital for Established Enterprise</i>
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## TABLE OF CONTENTS

	Page
<b>Chapter I. Financial Tests and Restrictions</b>	
Corporate Experience . . . . .	5
Where Acute Difficulties Appear . . . . .	6
Causes Leading to Corporate Insolvency . . . . .	6
Unwieldy Fixed Charges . . . . .	7
Four Parties at Interest . . . . .	8
Constructive Measures . . . . .	9
What Experience Teaches . . . . .	11
Important Principles . . . . .	12
<b>Chapter II. Preference Obligations</b>	
Meeting Corporate Obligations . . . . .	13
The Pay-Roll . . . . .	13
Present Day Division of Labor . . . . .	14
Raw Materials . . . . .	15
Discounts . . . . .	15
Acceptances . . . . .	15
Endorsements . . . . .	16
Notes and Bills Payable . . . . .	16
Commercial Paper . . . . .	17
Bank Credit . . . . .	17
Collateral Notes . . . . .	18
Coupon Notes . . . . .	19
Interest on Bonds . . . . .	20
Bond Payments . . . . .	21
The Retiring of Bonds . . . . .	21
Taxes . . . . .	23
<b>Chapter III. Fixed and Working Capital</b>	
Use of Remaining Funds . . . . .	25
Plant Investment . . . . .	25
Proportion of Fixed to Working Capital . . . . .	26
Expansion and Its Problems . . . . .	26
Materials Investment . . . . .	27
Factors in the Materials Problem . . . . .	28

*Table of Contents*

<b>Chapter IV. Surplus and Dividends</b>	<b>Page</b>
Surplus . . . . .	30
Distribution to Stockholders . . . . .	30
Investment of Corporate Funds . . . . .	32
Marketability or Currency . . . . .	32
Well Seasoned Issues . . . . .	33
Yield or Earnings Secured . . . . .	34
<b>Chapter V. Budgets</b>	
Value of Budget Making . . . . .	35
Practice Among Leading Corporations . . . . .	36
Use of Budgets . . . . .	36
Budgets for Branches . . . . .	37
Length of Period Covered . . . . .	37
How Prepared . . . . .	37
Revision of Budget . . . . .	38
Accuracy of Estimates . . . . .	38
Lee-Way Allowed? . . . . .	39
Advantages to be Derived . . . . .	39
Accounting Procedure . . . . .	40
Working Toward More Perfect Methods . . . . .	40
<b>Test Questions</b>	
<b>Answers to Starred Questions</b>	

## CHAPTER I

### FINANCIAL TESTS AND RESTRICTIONS

*Planning the sales and capital requirements ahead gives a freedom that cannot otherwise be had.*

—WALTER H. COTTINGHAM,  
President The Sherwin-Williams Co.

#### Corporate Experience

A corporation, we naturally find ourselves assuming, secures business in satisfactory volume and increases this volume year after year. The managers draw comfortable salaries, bond-holders receive their interest payments regularly, and stock-holders are gratified with the dividends they are paid. Fresh capital flows in from time to time to provide for expansion; subsidiary companies are taken over; and thus there evolves in due course an extensive organization, consisting of holding company and subsidiaries, and a more or less complex financial structure.

The corporate form of organization possesses great flexibility, and when an enterprise has been properly launched and continues to be well financed, the prosperous conditions just cited are likely to prevail. Thousands of corporations have demonstrated, and are demonstrating in a practical way, this to be the case.

The experience of a very large number of companies, however, runs contrary to the situation described. With them, this situation represents merely an ideal. Actual conditions are decidedly different, and worse. There is no denying that, for reasons which will be mentioned, corporations in considerable number are a disappointment, and a source of loss, to their owners; and that their careers as going concerns are filled with legal and business difficulties. This renders them, nevertheless,

of more than passing interest; the measures devised to meet these legal and business difficulties are worth looking into and the difficulties themselves emphasize the importance of the carefully planned internal financial management, which is described in later chapters.

### **Where Acute Difficulties Appear**

The corporation which moves in the direction contrary to expectations possibly continues for years actively in operation; its managers and owners engaged in one expedient after another to change the unprofitable condition. Acute difficulties, when they do at length appear, usually take either, or both, of two forms: A floating debt of undue proportions presses for payment, which can no longer be deferred; and interest on fixed charges, beyond the company's capacity to meet, becomes due. The firm's debts, in short, are unmanageable.

Explanations commonly advanced for these conditions are that working capital is insufficient and that banks refuse to extend the accommodation expected. Closer observation, however, indicates that these statements, while plausible and apparently borne out by the facts, fail to uncover the real causes for the company's embarrassment.

### **Causes Leading to Corporate Insolvency**

Investigation of corporations which have become insolvent shows that, as a rule, their difficulties run back for some little time and represent for the most part more or less serious deviations from sound financial management. Reasons for this conclusion will now be given.

The payment of dividends not earned, is obviously unsound financial management; yet this has often been done. The American Malting Company's directors, less than three months after the company commenced business and a year before the books of this new consolidation were balanced, commenced dividend payments. Through misleading methods of accounting, a surplus was shown, upon the basis of which dividends

were continued. These dividend disbursements at length reached a total of \$1,855,350, or some \$850,000 in excess of the actual profits during the same period. The directors, eventually, passed this resolution: "That the Company's outstanding obligations were about two million eight hundred thousand dollars (\$2,800,000); notes amounting to several hundred thousand dollars were being pressed for payment, and unless provided for, would go to protest. That the officers of the company were unable to negotiate further temporary loans." Hardly two weeks before, dividends had been declared.

Why this haste to declare dividends which too frequently characterizes corporate directors? The desire to make a market for the company's stock is doubtless one of the chief motives. Less subject to censure, doubtless, is the feeling of optimism over the company's future which induces the Board to undertake the disbursement of resources which ought to be husbanded with careful hand.

### **Unwieldy Fixed Charges**

Provision for bond issues in a corporation's financial structure has certain advantages in that money can be raised at a lower rate of return and secured from persons to whom the presumably larger, but more uncertain, stock dividends would not appeal. Thus, the securing of more funds at lower rates in the aggregate, represents to a company's directors an opportunity which they often utilize.

However, the earnings and assets, but particularly the earnings, which are expected to provide a sound basis for meeting fixed charges do not always accrue. The American Hide and Leather Company was to show, Thomas J. Ryan, one of its promoters, stated, "economies of consolidation which would not fall below \$4,000,000" and would be able to pay "7% on the preferred and from 8 to 12% on the common stock." American Hide and Leather has not, during the twenty years since these assurances were given, paid a single dividend on its common stock and approximately 110 per cent of unpaid dividends have accumulated on the preferred. This illustrates not only Mr.

Ryan's error but, more broadly, the discrepancies which prevail at times between actual corporate earnings and expected earnings.

The reasons for this discrepancy are numerous: A depression in general business may have set in; the management possibly has wasted a good deal of money in unwise experiments and ventures without solving the methods needed in order to conduct the company's affairs profitably; competition of a keen, vigorous sort perhaps develops, with a consequent undermining of the position expected in the trade, etc. Whatever be the particular causes in a given case, the outcome eventually is that certain interest payments fall due, which it is inconvenient to meet. Under the circumstances, various expedients more or less of the emergency sort are commonly resorted to: Short term notes perhaps will be issued, an additional flotation of bonds may be attempted, or, more likely still, working capital will be deflected to the payment of interest. While these methods possibly enable the company to weather its difficulties, particularly if they are the temporary sort and prosperous conditions prevail in general business, they have little effect upon the more deep-seated causes of non-success.

### **Four Parties at Interest**

When conditions such as have been described prevail, the corporation faces insolvency; and will become admittedly insolvent when claims for payment are pressed. Let us assume that these claims are pressed, as normally is the case, and receivership ensues. Who are the parties at interest in determining what subsequently shall be done?

1. Creditors, the holders of the company's floating debt and bond issues.
2. Stockholders, both preferred and common.
3. A syndicate representing banking or brokerage houses, interested in the underwriting of the reorganization plan.
4. The corporation, the interests of which in so far as distinct from the above groups are represented by its management.

These four groups face each other, with interests which, in certain respects, are directly antagonistic. The corporation needs relief from its present burdens and a supply of fresh capital. Bondholders are loath to surrender their claims upon the company's assets, and threats of forced liquidation, upon occasion, are to be expected from them. Stockholders object to having their claims wiped out, or reduced drastically to say the least; and they are also adverse to putting up fresh capital. The syndicate champions plans which its members estimate will re-establish the corporation, with a corresponding enhancement of their own reputations and profits. Charges and counter charges pass freely, so experience runs, when these conflicting parties at interest come into conflict with each other.

### **Constructive Measures**

Adjustment of the conflicting interests specified doubtless would commonly fail to take place at all were it not for this fact: Corporation assets derive their real value when utilized, as planned originally, in the company's activities as a going concern. While the first lien bondholders of an electric interurban railway could very likely insist that the properties be liquidated, the rails and ties when torn up could be disposed of for little; and the same would be true in selling the company's stations and other equipment. Liquidation outright, in fact, represents serious shrinkage of a corporation's assets. With this fact kept in the background as a reserve argument to bring recalcitrant persons into line, the usual procedure is the formation of committees representing the various interests and authorized to work out a solution. Recognizing that they cannot have all they would like and that insistence upon it means less for all concerned, these committees harmonize their claims as best they may.

While these committees can scarcely draw up a plan of reorganization satisfactory to all concerned, they do find it possible in practice to work out constructive measures, which can be accepted and made legally binding. Usually these measures include:

1. Reduction of the floating debt.

The raising of funds required for this will likely be undertaken by banking interests through the sale of issues having prior claims upon assets, providing the company's situation is not regarded as serious. Were the situation deemed serious, however, the sale of new securities probably will give way to a plan whereby an assessment will be levied upon stockholders. Holders of the junior bonds may also be called upon to pay an assessment, though this occurs infrequently. With the funds thus secured, the floating debt is reduced and working capital replenished.

2. Reduction of the fixed charges.

This involves the retirement of a part, at least, of the outstanding bonds and the substitution for them of stock issues, particularly of the preferred. Fixed payments, in short, are transferred into contingent payments; bondholders are induced, in part at least, to become stockholders.

3. Redistribution of securities.

This has been indicated above. The company's financial structure undergoes an overhauling; while, as a rule, the total outstanding bonds and stocks are not reduced appreciably in amount, bonds come to represent a lower and stocks a higher per cent, relatively speaking, of the capitalization. Just how much a particular group of holders will submit to in the shaving of its claims and the refunding of them into issues less well intrenched, depends in large measure upon whether or not it holds the whip hand. Prior lien bondholders, needless to say, come decidedly nearer dictating the situation than do holders of either the preferred or the common stock. Incidentally, in order to force out those who for one reason or another refuse to accept the reorganization arrangements, a new corporation is sometimes organized, whose securities are exchanged for the old. The old corporation ceases to function and its securities, however stubbornly held, are for all practical purposes worthless.

4. Provisions of a protective nature.

The various security holders in submitting to the assess-

ments, ranking down of their claims, exchange of their fixed obligations into contingent obligations, etc., cherish the expectation that, once the corporation's difficulties are righted, it will prosper and eventually render their position one in which past sacrifices have been justified. In order that these expectations have a sounder basis, various provisions of a protective nature often are provided. These ensure the junior bondholders, for instance, against indiscriminate issue of new bonds; or preferred stockholders against the lack of voting power should dividends not be paid them. Perhaps a voting trust, ensuring the company against changes in control, will be arranged. Recognizing that errors more or less serious have been made in the past, those in charge of the reorganization hope through the insertion of provisions such as these to win more favor for the reorganization plan itself and to ensure in somewhat larger degree its ultimate success.

### **What Experience Teaches**

Corporations have been, and are being, reorganized successfully in large number. Union Pacific, a railroad whose securities all stand today in high favor with bankers and investors, was once bankrupt; and so was Atchison, Reading, Northern Pacific, Westinghouse Electric and Manufacturing Company and other properties now considered decidedly substantial. But, even so, the seriousness of the difficulties developed should not be underestimated.

The corporation forced to undergo reorganization has its affairs transferred to the Courts, which cannot fail to be a serious hindrance to the efficiency with which its operating affairs ought to be conducted. There develops considerable publicity as a rule, of the adverse sort; this harms the company's credit with the trade and hurts the sale of its securities. The reorganization itself entails legal fees and charges in considerable amount, and additional underwriting commissions when the new securities provided for are floated. Those originally connected with the company, moreover, and presumably most interested financially and otherwise in its success, upon the outcome of even a

so-called successful reorganization are almost certain to find their losses heavy; and, due to the factional strife consequent upon reorganization, they perhaps have been embittered and hold in scant regard the enterprise and associates with whom they once co-operated in good-will.

Those inclined to look upon receivership and reorganizations lightly ought to consider the teachings of corporate experience; and take steps in advance to prevent, in connection with their own corporations, these difficulties and losses.

### **Important Principles**

Corporate experience, that which is successful and that which unfortunately is otherwise, indicates that:

1. Approved plans and methods for the financing of enterprises are available to those who wish to make use of them.
2. Undue deviation from these plans and methods, whether through ignorance or carelessness, represents unwise financial management.

Let us talk over in the chapters which follow certain of these approved plans and methods with reference to the internal financial management of a business.



## CHAPTER II

### PREFERENCE OBLIGATIONS

#### Meeting Corporate Obligations

In the internal handling of the funds of any corporation, that is in keeping the plant going, and operating for profit, we shall soon find that we are not at liberty to use our funds as we choose. There are certain obligations that demand first place, and others that follow very closely after. The position of the owners or stockholders of any works is at the end of a long line of necessary expenditures. These must all be properly marshalled and taken care of carefully or we shall get ourselves into trouble as has been described in the previous chapter.

#### The Pay-Roll

One of the first of the obligations for which we must provide, in fact *the first*, is our pay-roll. Our laws recognize the absolute necessity of labor being regularly paid. The work of time-keeping, making up the pay-rolls, getting the necessary denominations of money from the bank, counting and putting it up for each employe, is an important and expensive part of any internal financial management.

It would be difficult to imagine how disaster could come more quickly to any enterprise, than to neglect the regular paying of the roll, even if it were not legally required. Labor must have money regularly if it is to continue at its tasks. It is interesting to think simply about the matter of our present day division of work, and to get away from all technical definitions and arguments. We shall then see why, aside from any other reasons, the pay-roll must be regularly met.

### Present Day Division of Labor

If each individual could produce all the things he required for life and its enjoyment, life would be very simple, and we should have no need of large factories, trading or transportation facilities. We know, however, that such an arrangement of production would be most wasteful, for the changing from task to task would consume much time and we would acquire much less skill.

While the present specialization of work tends to narrow the worker, who has but one small part of an entire process to perform, and does that small part over and over thousands of times, the total result of the plan produces many times more wealth than independent effort could do. However, it makes necessary the purchasing of the products of others, and hence the use of money is imperative.

The tool-makers spend their entire day making tools that they have no idea of using themselves, for they are making them "for the trade"; the miners bring out many tons more coal than they will burn, it too is "for the trade"; the locomotive engineer's good wife fills his dinner pail with her homemade food which they have bought with their own money, and he leaves his home, where all his personal interests center, and spends his days hauling the goods of others from place to place, in none of which he has any personal interest. We cannot say that the aim of the average person, who does his part for the common good, is an unselfish one, yet the work of all is in fact expended for the common good.

The different classes of producers cannot barter, cannot go about to find some one who has the things they need, and who needs the things the producers have to offer. There must be money to represent the values produced and exchanged, and it must be always at hand. The more specialized the community, the greater need for money at every turn.

If any enterprise is to be kept going regularly, therefore, the pay-roll will have to be the first consideration.

## Raw Materials

The task of the manufacturer is to manipulate material and make it into more valuable shape. Every factory requires some of the products of other factories, mines or quarries. The pin maker must have wire, the foundry requires pig iron, the makers of hardware must buy many kinds of rod, sheet and bar iron and steel, and so to the end of the list. Without the steady incoming stream of raw material, the factory must have frequent shutdowns and loss.

These goods are in the usual case purchased without ironclad arrangements for payment, although payment is expected during the succeeding month. As a result, the offsetting item, in the balance sheet, to raw materials purchased appears on the first of the month as "Accounts Payable." Such accounts are usually cleaned up to a large extent during the first ten or fifteen days of the ensuing month.

There are times when money is tight or needed for some other purpose, and the temptation to allow "Accounts Payable" to wait at least a short time, becomes very great. The practice, however, is dangerous, first because the total quickly becomes large and difficult to handle at all, and second for the reason that such delays injure credit, and make material more expensive. The best discounts are given to prompt payers.

## Discounts

Being able to take advantage of discounts is an important factor in business, and much money can thus be saved. It also fixes the company's financial reputation on a firmer basis. Some large houses have a regular plan to pay all such bills on a given date each month, allowing themselves time to prove and enter the bills, check the material, write the checks, etc. This plan makes a very fine impression on creditors, and all are anxious to sell such firms.

## Acceptances

The selling or buying of goods under the plan of acceptances appears to have some strong advocates, and to be growing in

favor. Under this plan the purchaser agrees upon a definite date for payment when making his purchase, and signs a sight draft to cover such agreed items. Purchases under this plan become fixed obligations, the payment of which cannot be varied as accounts payable may be if necessary. An accurate record must be kept of all the acceptances signed, and care must be taken to have funds in hand as required. Failure to meet these agreed drafts would seriously injure the financial standing of any one, and place him in a class which must buy for cash.

### Endorsements

While we are considering the things for which we must pay, before we are free to use our money as we may think convenient, we perhaps should consider the possibility of having to make good to the bank some of the acceptances we have taken from those who have purchased goods from us.

We may have endorsed them and negotiated them, and it is fair to suppose that some of them will fail of collection so that we shall either have to repay such amounts to the bank, or they may be deducted from our bank balances. If some of these are large, they may come back at a time when it will be very inconvenient to have them so returned, and become troublesome items.

If it becomes necessary to draw the bank account down pretty close to meet some accumulated obligations, it will be well to keep our eye on any large drafts that we may have endorsed, which are falling due at the time and may possibly trouble us in this way.

### Notes and Bills Payable

Notes, of course, are for definite amounts and are due upon fixed dates. No latitude is allowed. We must either pay them or arrange for renewal. Creditors could sue on either accounts payable or bills payable. The open accounts, however, are to be proved and may have offsets, but notes payable are definite as to amounts and date.

It is customary to borrow money on notes from banks, but there are firms of note brokers whose business is buying and selling commercial paper for those who are of a high class financially.

### **Commercial Paper**

Commercial paper is a form of financing by which money is raised either to buy additional stocks of materials or to carry stocks on hand which temporarily necessitate borrowing. For example: if a company wants to buy \$100,000 worth of wool or leather, it may issue notes to obtain money for the purchase, which notes should run only until the raw material is manufactured and sold. In other words, when a company receives the normal profit on the manufacture of its goods, it should immediately retire notes it may have issued to enable it to carry its raw material and partially finished product. Commercial paper should never be issued against materials that are to become fixed assets, such as machinery or any plant equipment. The quicker the turn-over of any organization, the shorter the commercial paper will be that is outstanding. Ordinary commercial paper runs from sixty days to four months. In the case of a slow turn-over, commercial paper is sometimes sold to run six to nine months, but it should not be issued for as long a term as a year. It can be readily seen that notes of this nature, when protected entirely by liquid assets, are a very stable form of investment and are the basis of very attractive temporary borrowings by strong companies.

### **Bank Credit**

It is particularly desirable to maintain liberal credits with banks because almost all kinds of business at times require outside funds to tide over unusual places, and it is a great convenience to be able to obtain loans. This relation must not be strained. It is necessary in relations with banks to keep very definite records of all obligations and avoid any default in meeting them. Bank loans are, of course, supposed to be comparatively short time loans.

In the borrowing of funds it is wise to deal liberally and allow the bank to make profits from the transactions. This will strengthen the relations and make it mutually advantageous.

There is no reason why any legitimate business should not be able to take advantage of such an arrangement, within safe limits. Bankers are in business to furnish this facility to the business world; it is the source of their profits and as necessary to their prosperity as to that of the borrower. Whether they will loan or not, however, rests with them to decide, and it is wise to build a good reputation by the prompt discharge of all obligations to them.

The volume of this class of business shown by the statements of some of the large banks is interesting to note:

The National City Bank shows recently	\$519,246,695 on loans
The Guaranty Trust Co. shows recently	438,826,951 " "
The Chatham & Phoenix National	90,985,390 " "
The Importers & Traders National	26,219,808 " "

The reader will find it instructive to notice this feature of bank statements, in the case of banks he knows in his own city.

The same thing is seen on the opposite side, in the financial statement of important concerns, who borrow large sums. A statement recently in hand for a leading steel corporation, shows a total liability of \$77,354,610 out of which notes payable is shown as \$10,618,790 and accounts payable \$63,201,418.

These figures will serve to illustrate to what large sums these temporary loans run, and the importance of the subject.

The following is a quotation from the advertisement of a bank, recently noted:

"The wealth of this bank does not remain idle, like gold in coffers, but is constantly employed as a basis of credit for the legitimate enterprises of industry and commerce and thus is in the continuous service of the community. It extends credit and makes loans on collateral. It seeks to employ its resources in the development of industry along broad conservative lines, to meet the needs of American business of today and tomorrow."

### **Collateral Notes**

It is a frequent thing, when borrowing from the banks, to

deposit as a pledge, some other security of value, which is assigned to the bank to protect them from loss should the main note fail of payment. As the securities held by business men are thus pledged over and over again, and as they are returned to them after the payment of their notes, the transfer of ownership is usually taken on a separate paper, and the collateral kept clear of signatures, endorsements, etc.

The collateral carries an additional reason for paying at maturity, as it would be very embarrassing to have one's securities sold by the bank. This would hardly be done without full notice of the failure to pay being given, with opportunity to make good.

### Coupon Notes

In addition to bank loans and commercial paper which appear in notes and bills payable in any financial statement, there is another class of notes put out by large firms which run for a longer period. These notes carry coupons and call for a repayment of principal at a definite date in the future, the same as bonds. They should appear in a balance sheet, while outstanding, as a fixed liability under the heading of "Short Term Notes." Such notes may be issued for numerous reasons. Recently there have been large numbers of short term notes being issued by strong corporations because they were unwilling to pay prevailing high interest rates for a long term of years. For example, the Western Electric Company recently issued some 7% notes due in 1925 to yield about 7.35%. The maturity, 1925, was placed in that year in the expectation that, by that time, commodity prices and interest rates would be materially lower and the company could then re-finance with long term bonds on a much more favorable basis.

A most interesting illustration of the use of short term notes recently is the Dayton Power & Light General Mortgage 7's, due in 1923, and offered to yield 7.50%. This company has an open mortgage under which it can, at any time, issue additional long term bonds. Bonds already issued under that mortgage, 5% bonds, were quoted in the market at about 75 to 80.

If additional long term bonds were sold, the cost to the company would be nearly 7%. This cost would, of course, practically continue throughout the life of the bonds. In selling short term notes on a 7.50% basis, the expectation was to re-finance three years hence on a long term basis much more favorable to the company.

Weaker companies are forced to sell short term notes because the public has not sufficient faith in their permanent stability to invest in obligations of the property that run without possibility of repayment in a few years. An investor may figure that the prosperity is bound to carry from three to five years, but does not feel able to figure beyond that time. As a result, the company issues short term notes or, in other words, agrees to repay principal in the comparatively near future.

### **Interest on Bonds**

Bonds are usually issued with interest coupons attached, one coupon for the interest of each six months until the maturity of the bond.

The rate of interest to be paid is definite, the coupon shows the exact amount payable on each bond, where payable, and the date due is positive. Knowing the exact number of bonds outstanding and the amount of interest on the entire issue, it is an easy matter to charge the correct amount of interest in the statement for each month, setting it up as an accrual and thus avoiding a large charge twice each year, even though the payment of interest is actually paid but once each six months. An issue of bonds is often secured by a mortgage. Because it is impractical to give a mortgage to each purchaser of bonds, and because the action of one bondholder to protect his interest would have a serious effect on the holdings of others, one blanket mortgage is drawn to a trustee, whose duty it is to protect all holders.

It is usually provided that a default in the payment of interest for a term of three or six months, makes the whole mortgage debt due, and it is then the duty of the trustee to foreclose or demand protection for the bondholders. A company having

outstanding bonds must therefore make definite plans to pay the maturing interest without fail, by having sufficient cash in the paying agent's hands at the maturity of the coupons.

### Bond Payments

While every going concern has outstanding liabilities, to the payment of which attention must be given, it is usually only the larger ones that have issues of bonds. These are many times for large amounts, as the examination of financial statements will show. The statement of a large steel manufacturer shows a bond issue of \$144,000,000. Such obligations are pretty well understood by all students of accounting and financial matters. In the usual case, bonds run for longer terms than notes, but it is interesting to observe how they tend to come together at times.

Under ordinary circumstances, however, notes are expected to run for much shorter time than bonds. Railroad bonds, of which large amounts are sold, frequently run fifty to one hundred years with no provision for the retirement of any part of the issue until the end of the full term, if the interest payments are regularly paid.

### The Retiring of Bonds

State, county, municipal, school and other similar bonds provide frequently for the payment of some of the issue each year, and in that case some of the bonds run short and some long terms, each one showing definitely the date of maturity. Other classes of bonds provide that a given number of the issue may be drawn and retired from time to time, and we frequently see in our papers, advertisements of such drawings for payment. A public advertisement is the usual way of giving this notice. The feature of particular interest to the holders of such bonds is that no interest will run after the time the bonds are called in.

One or two examples of this class we may notice with interest.

**Republic of Panama****5% Secured Sinking Fund Thirty-Year Gold Bonds Due November 1, 1944. Called Bonds**

Notice is hereby given in accordance with the Trust Indenture made by the Republic of Panama to the Farmers Loan and Trust Company and William Nelson Cromwell as Trustees, dated November 2nd, 1914, that the following 5% Security Sinking Fund Thirty-Year Gold Bonds, dated November 2nd, 1914, have been drawn for redemption at a price of 102½ and accrued interest to the date of such redemption, to absorb as nearly as may be, all money now in the Sinking Fund.

(Then follows the numbers of 60 bonds)

and will be redeemed through the said sinking fund at said price of 102½ and accrued interest to the date of such redemption, by the Farmers Loan and Trust Company, Trustee, at its office, Nos. 16-22 William Street, New York City on November 1st, 1919, from and after which date the bonds so drawn *shall cease to bear interest*, anything in such bonds or coupons pertaining thereto to the contrary notwithstanding.

A similar notice is quoted from a recent daily, in the name of the American Steamship Company of West Virginia, calling in 238 bonds of \$1,000 each, and closing with this provision:

"Funds have been furnished the undersigned for the full payment of the above numbered bonds on November 1st, 1919, at 105 and interest, and *all interest* on said called bonds *will cease* from and after said date.

Illinois Trust & Savings Bank, Trustee."

It is certainly good financing to provide for the constant decrease of bonded debt, under some definite plan. There are many ways in which the assets of a concern tend to decrease in value, wear and tear, depreciation of buildings, machinery becoming out of date by improvements, and many other familiar ways. Thus, it is good practice to scale the liabilities and keep them in safe proportion to the prevailing value of the assets, on which they are a lien.

It is always possible, if there is no provision in the bond agreement for the calling in of some of the bonds, to purchase them in the open market and by action of the directors, destroy them. It is, however, frequent practice to provide for the retirement of maturing bonds from the proceeds of a new issue, or even a

larger one, to cover the original bonds and funds needed for enlarged plans.

If the property upon which the bonds rest is growing more valuable by accretion or consolidation with larger holdings, this plan of allowing the entire issue to run to maturity, will probably not be objected to by the purchasers of the new issue.

The facts in any one case are peculiar to that case, and therefore no general plan can be suggested. The financial officers of the company owing the bonds, must study their own case and make the necessary provision to cover or renew the bonds, as the directors may determine.

### Taxes

Death and taxes, so runs the old saying, remain in even the most uncertain times two sure things for which calculations must be made. There will probably be an annual tax demanded by the State in which a corporation secures its charter.

While a corporation is considered "foreign" to any State other than the one giving it its charter, many of the others are taking steps to make all corporations feel "at home" by demanding taxes of one or more kinds, franchise, license, income, etc.

It is becoming increasingly difficult to anticipate the taxes that will be demanded in the various States during any one year, and to find out when assessments and payments are expected. It is poor business to allow a tax that must be paid, to become overdue and suffer a penalty, but some will be unknown and unexpected unless the greatest care is exercised.

It is, no doubt, one of the difficult duties of legislators to find new sources of revenue to keep pace with increasing State needs, so that if there are any rights or privileges on which corporations, especially "foreign" corporations are not taxed, these corporations may rest assured they will not long be overlooked.

All other kinds of taxes, however, fade in comparison with the Federal Income taxes. The needs of the government during the war years, and those of the years to come, have made and will continue to make burdensome charges against

the income of individuals and corporations. Reserves should be set up, by those making monthly statements, so the entire amount to be paid, as near as may be estimated, will not fall upon the expenses of the month closing the fiscal year.

During the last few years the government has been selling temporary certificates, interest bearing, in anticipation of the funds to be received from tax receipts and other permanent sources. These were convenient for the investment of funds reserved for such taxes, because interest was being earned during the time the tax was maturing, and when it was desired to make payment, the transfer and application of these investments to the payment of the tax were easy.

This tax is payable directly from the funds that would otherwise be available for dividends to stockholders, or for other corporate purposes, so that while it appears to fall upon the corporations, it really falls upon individuals, and every stockholder is thus made to bear his portion of the tax by decreased dividends.

We are all so accustomed to being protected in our personal and corporate rights, it is difficult to realize that our enjoyment of this protection is a direct result of government. Without the community protection of all members, all capital would go to those physically strong enough to take and keep it. The others of the body politic would be slaves to the strong. The payment, therefore, of whatever may be necessary to maintain this protection, "is for your life," but the amount called for is so much larger than any previous demand that the payment is a serious burden.

## CHAPTER III

### FIXED AND WORKING CAPITAL

#### Use of Remaining Funds

On the preceding pages we have considered that part of our income which belonged to others, items that we are obliged to provide for before we can think of ourselves. Let us now consider how we may best use what is left.

#### Plant Investment

Is it better to arrange to have our product made by various manufacturers, or shall we invest a large portion of our money in our own factory? Even if in the beginning of a small and new venture it may seem best to hire others to do our work for us, there will be tools, jigs, patterns, etc., peculiar to our work, and of no value to any other firm. When these are made we shall either have to pay for them direct, or pay a larger cost for the manufactured goods, to cover their cost, which is the same thing. Our investment in plant, tools, etc., will, therefore, begin early in our operations and run to the end.

The radical difference between plant and material investments is that our investment in plant, tools, etc., is permanent, while that in material comes back to us through sale. While the investment in our plant becomes the basis of our operations, it is not working capital, to be manipulated, refined, perfected and sold. It is not expected that any part of a plant will be disposed of.

It is difficult to see how any enterprise of importance can find it practical to operate without owning its own factory or plant. The amount invested in this way may, however, become a heavy load unless all of the important considerations have been given careful thought.

### Proportion of Fixed to Working Capital

Examination of the reports of a half dozen large steel and iron plants shows in permanent investments over \$500,000,000 against \$225,000,000 in working capital, or about 44 cents of working capital for every \$1.00 invested in plant.

A like number of large manufacturers of heavy machinery have \$182,000,000 invested permanently in plant, against \$85,762,000 of working capital, about 48 cents of working capital to every \$1.00 of investment in plant.

A number of large miscellaneous manufacturers in other lines show a permanent investment of \$177,800,000 to \$80,500,000 of working funds, or about 45 cents to every \$1.00 invested in plant.

Figures taken from printed reports are, of course, likely to be misinterpreted, because there is not sufficient information given to make them understood, but it is thought worthy of serious consideration that the showing of these different classes is so nearly alike. These figures appear to show that in manufacturing business for every one dollar of permanent investment half that amount of working capital must be provided.

The experience of other companies will be of considerable help to any one engaged in like business; but there are, at the same time, individual questions that must be settled by those in charge of each separate plant. The best results will have to be worked out for each particular line of business, and the amount of wise investment determined in that way.

### Expansion and Its Problems

Many a venture has been wrecked by its prosperity. It has begun in a small way, its product has been accepted by the public so rapidly that the original plans have become entirely too small. The need for additional capital for investment in plant and material has been much beyond the ability of the owners to supply and they have gone to wreck by prosperity. Working capital is essential, but on the other hand there are very valuable reasons why a permanent factory home is necessary.

After the buildings have been erected and the machinery placed, any error made which does not allow of the best manipulation of the product from one process to another will be a source of continuous loss, and will be difficult to correct. The benefit of rightly placed machinery, tools, etc., will be continuous also, and the greatest benefit will be gotten out of permanent foundations for tools, piping for gas, air, oil or for other purposes, side track locations, cranes for loading and unloading, and many similar devices which pay daily dividends on their cost.

Serious consideration should also be given to the location of a factory. From the physical side there are the considerations of sufficient room for buildings and yard, convenience and cost of receiving and shipping material both raw and finished, also rail and water facilities, the present and the prospective tax expense.

Just as important, perhaps more so, are the matters of environment. In the estimation of the public, our shops are real factors in civilization. Manufacturers themselves have learned that high grade, intelligent and contented employes are much more valuable than those of lower standing.

Skill is acquired in manufacturing by doing some small part of the whole process over and over a thousand times, but the constant doing of the same thing narrows the mind and tends to discontent. Unless some effort is made to overcome this drift by change of interest leading to physical, mental and moral growth, the men grow up as boys in everything except the task they perform. The location of a factory, therefore, becomes important in the features that assist in developing the workers and keeping them contented. The nearness to desirable towns and cities where the workers may enlarge their mental, social and religious natures, the surroundings and outlook, healthfulness of location, water supply, etc., are some of the important things that go to make up the cost and the real worth of factory locations.

### **Materials Investment**

A financial question that is particularly important to any business is that of investment in material, raw or partly manu-

factured. The getting of the supplies, storing them carefully to avoid loss and unnecessary handling, are features of location largely, but the kind, quality and quantity that may be wisely purchased becomes both a financial and an operating matter.

The quantity of all classes of material necessary to operation for a given time ahead must be carefully estimated, the time required to get additional supplies, and the period for which it is wise to buy, must be decided upon. These questions will depend for decision largely upon the orders in hand, the time when goods must be delivered, and the present and prospective condition of the market for such supplies as we may need.

It is difficult to see that any fixed rule can be made for the investment in "stores." A rule or estimate made at one time would not apply at another time, and a rule applicable to one factory or to a kind of business would not apply to another. In taking large orders for future deliveries at a stated price and time, accurate calculations covering the necessary material would have to be made, and if the present price was lower than the future market promised to be, immediate orders would have to be placed for at least a large part of the material needed. This might become a heavy investment, to be carried until the delivery of the finished goods.

### **Factors in the Materials Problem**

Another consideration that would vary in different factories or in different parts of the country and which would materially affect the purchase and carrying of material both physically and financially, is the distance such material must be transported, and the probable delay enroute. A serious loss might result if the supply of some needed material became exhausted and the whole process stopped.

Other questions outside the operation of any one company affect this matter and call for heavy expenditures of money. At the present time, and for several years back, the vital question of fuel has called for a great deal of thought. Both the mining and transportation of coal have been so uncertain that some concerns have thought it wise to stock up on coal sufficient for

a year or more, while under usual conditions prior to the war, probably one month, or possibly one week, had been far enough ahead to look.

The disturbances of the present, and the long time necessary to secure deliveries of purchases, make it seem wise financially to make unusual investments in material. The ideal condition is to be able to get supplies quickly, make them up by a short process, and get them sold with little delay; but only comparatively few companies are so placed. Those who cannot do so, whose purchasing is a difficult matter and whose deliveries require much time, with harrowing and expensive delays, whose manufacturing process is a long one, and those whose plan of selling requires their carrying customers' balances for a considerable time, are proportionately farther from the ideal condition.

Where a single article only is manufactured, all these considerations are present, but the quantity going into its make-up can be more accurately calculated and the quantity of material needed for one hundred, one thousand, or ten thousand articles can be reckoned with considerable precision; and the total factory output being determined, the total quantity needed for a given time would be a matter of simple calculation.

A much more difficult calculation is required when a factory makes many and varied articles, and the quantity of material of each kind must be provided. Too much of one kind and too little of another locks up the labor and material in the one overstocked, while the loss of sale and profit on the more popular article is a disadvantage on the other hand. All of these considerations mutually concern all departments.

Even in a store, where merchandise is sold in the same condition as when purchased, some of these questions call for intelligent consideration, not by percentages, but by study of the conditions as they exist and as they change from day to day. What is the demand going to be for some particular thing or line of goods? Will the wholesale price advance before a new stock can be secured, and how long will the demand continue? These are questions of selling first, but quickly become financial questions for they involve profit and loss and investment.

## CHAPTER IV

### SURPLUS AND DIVIDENDS

#### **Surplus**

Our surplus cannot be determined by the cash in bank, but is the difference between total income and operating expenses. It is not affected by investments. If those in control determine to buy or enlarge a factory, or to invest heavily in material, all our surplus money may be so used, yet our statement will show possibly a large profit or surplus.

After all obligations to others have been paid, what is left belongs to the stockholders of a corporation. The surplus account is practically the difference between assets and liabilities, though the real nature of reserves and other special accounts needs to be questioned, before we can, from the surplus account, learn what amount is available for dividends. It is, however, considered wise to declare only such payments of dividends as the available cash will allow. The surplus is frequently drawn upon by the issue of a stock dividend when a cash dividerd is not thought wise.

#### **Distribution to Stockholders**

Under the usual corporation plan, the common stockholders are the ultimate owners of the business. Others are interested in the enterprise only in a limited way. The common stock takes the risk of loss, and to it belongs the gain. The common stockholders are not the corporation, but are individuals with independent personal interests outside as well as within the corporation. The corporation, as such, can hardly demand more than that its expenses and obligations be provided for, with a safe working fund to make its operations easy.

What remains after all of this is covered, belongs to the holders of the stock, a stated dividend to the preferred stock,

and the remainder to the common, under the usual plan. The corporation is not a savings bank, and has no obligation to take care of or right to withhold the money that belongs to the stockholders. It is the duty of the directors to pay over to the holders of its stock, in the shape of dividends, any funds in excess of the needs of the corporation.

There are, however, some considerations which govern such a distribution of funds which it may be wise to mention here. It would be a new transaction, and perhaps a difficult one, to get back from stockholders funds that had been paid them in dividends, if the later needs of the business required more money. It would be a simpler thing to hold back from dividends more than was necessary rather than pay it out and find later that too large a payment had been made. A small safe dividend would be better than one too large.

A further reason why directors may think it wise to pay a dividend smaller than the available cash will allow, is that it is much better practice to increase dividends slowly and only as may be considered normal, rather than at one time name an unusual rate and then find it necessary to drop back to lower payments at a later date. Increasing dividends from period to period would create a much better impression in the public mind, particularly upon investors, than fluctuating rates. Frequent variations in dividends that would lead to speculations, and if lowered, to disappointment and loss, would not appear so conservative as lower dividends regularly paid. The market value of the stock does not affect the company, except in case additional stock is to be sold. So far as the stockholders are personally concerned, a regular conservative dividend is to be preferred.

Under these conditions there will be at all times more or less cash in the treasury which has not been distributed to the stockholders, which if wisely invested will earn interest. If we leave this additional money in the bank, it will be immediately available, which is one of the reasons why it has been withheld, but it will earn little if any interest. If there are other ways in which this money can be used to bring larger returns, it should

be so used. In placing it, however, we must not forget the purpose it is to serve.

### **Investment of Corporate Funds**

Absolutely the first consideration in investment of such funds must be security. It would certainly be short sighted to allow the promise of large earnings to tempt us into unsafe investments. There are many issues of stocks and bonds that have paid satisfactory returns for so many years that they are recognized by law as safe investments for trust funds. The government issues of recent date, while they are absolutely safe, pay low rates of interest. Discounts are experienced and must be considered.

### **Marketability or Currency**

The desirable feature about an investment next to security is probably currency, by which we mean the readiness with which it may be exchanged for cash or other investments. These funds have been held back from the stockholders in order to provide a safe working fund under all circumstances, and unless they are so invested as to be instantly available, they are not serving the purpose for which they were held.

Mortgages on city and farm lands are very many times placed on the basis of half value or less, and as security they are good investments but difficult to transfer. They are not desirable investments for surplus funds. Purchasers must be sought out and satisfied as to title, value, location, and all the other necessary points, before a sale can be made. Even though mortgages are of the best, they do not possess the currency feature needed.

Bonds issued by well-known companies, states, cities, towns or school districts, usually pay a larger interest than government bonds, and they are usually secured safely. Large issues of bonds are usually safer and more current than smaller ones, for the reason that these issues are handled in very large amounts by perhaps one or two financial dealers, and resold to

the public. The transaction warrants the greatest care in investigating all the legal points that make them good security. Any flaw in them would mean so large a loss to the dealers that they would not act unless they were well satisfied on all points.

Another thing about a large issue is that many people are interested who would not give any attention to a small issue. The securities occupy a well-known place in the financial world and their sale is quick and easy. They have the feature we are discussing. Some of these well-known bonds are placed for fifty or more years, and while this long term would seem to make them valueless for quick transfer, such is not the case. We are not expecting to wait for our money until the maturity of the bond, but to sell such securities to other investors when we need the money.

### **Well Seasoned Issues**

In considering the purchase of bonds for investment it is well not to buy those of recent issue, until they have had time to establish their value. It is true that the dealers who marketed them gave them at least their moral endorsement, but there is a heavy temptation offered such dealers sometimes, and their judgments may become warped in favor of the issue. In the case of large issues of bonds on new enterprises the dealers buy them at a discount from the company issuing them, and resell them to the public. If the enterprise is successful the bonds become well established, but if the opposite happens, the value falls, and those who purchase them before they are known to be strong, sometimes lose heavily. On an issue of several millions, if the dealers buy them for 80 or 85, and can sell them at par, the temporary profit is a large sum, and some of them will take a chance.

No securities which are not well known and fully established, no matter how large the earnings, should be considered proper for the investment of surplus funds such as we are discussing. If the individual stockholders care to invest their dividends in securities which do not possess this currency feature, that is another matter. Officers of corporations should not do so.

### **Yield or Earnings Secured**

When in our search for investments, we can select those which provide security and currency, we may then ask for return. The whole purpose for which we are in business as a corporation is profit, but it must be a real and permanent profit.

It is the usual law governing investments and interest, that the better the security, the lower is the rate of interest or return. A bond of undoubted security can be floated at a small rate of interest, and if we are buying such bonds, our return will be small. If we are buying older bonds that have been out long enough to have established their value, although the rate of interest they bear on their face is desirable, our earning on what we invested would be small.

The funds we are discussing are trust funds, they have been withheld for a specific reason from the stockholders to whom they belong, and those who have withheld them should be content with such earnings as can be secured from investments that are safe and liquid.



## CHAPTER V

### BUDGETS

#### **Value of Budget Making**

The various elements encountered in handling a company's internal finances have been considered. To what extent, let us now ask in conclusion, is it feasible to assemble all these elements systematically and use them as the basis in forecasting our financial requirements? Considerable attention is being devoted to the solution of this problem, which its importance well justified.

The method employed is to work against an estimate or "budget," the purpose being to compel a careful advance study of conditions as they are thought to be, and then to check this estimate with actual results as they develop.

A calculation of the amount of fuel required to run an engine for a definite time would involve the quality of the fuel, the efficiency of the boiler, variations of load, the temperature of feed water and other features of steam making. The effort to determine which feature of the actual operation explains the difference between the budget and the result would certainly bring all conditions into light. Such study would result in steadied operations and all possible savings.

It can easily be seen how valuable would be an estimate of the theoretical quantities of fuel, ore, limestone, etc., per ton of output from a blast furnace compared with the quantities actually used and the tons of product sold. Pay-roll estimate to produce certain desired results, compared with the payment made and the result reached, is also an interesting study. The question naturally arises; how far is it feasible to go in the use of budgets? What is the practice of leading corporations today?

### Practice Among Leading Corporations

With a view to presenting well-considered information upon the questions just raised, the author communicated with a considerable number of corporation officials, treasurers and controllers in the main. Since the information supplied was understood to be more or less confidential in nature, the names of these officials and their respective companies need not be disclosed since it will detract but little, if any, from the value of the citations which follow. These corporations produce a well distributed, and hence representative, list of products — seven machinery manufacturers, three railway equipments, three motor car, two rubber goods, two sugar, two food products, one steel, one oil, one tobacco, one chain store, one chemical, one matches, and one enameled ware — twenty-six corporations in all.

### Use of Budgets

"Do you make a definite budget or estimate of expenses?"

Four officials informed us that a definite budget was in use; nine that it was not used; and two were contemplating its installation within the near future. The other officials were making use of the budget plan in part.

"Our company does not apply a budget system to all its activities," explains the official of one of these companies. "We do have a system of requisitions covering all improvements proposed to be made at any of our plants and for repairs estimated to cost in excess of \$250 for any one job, and for other specific expenditures. If, as the work progresses, it is found that the cost is going to exceed the amount authorized, an additional requisition is required, for the excess cost. If upon completion of a job, it is found that the cost has been less than authorized, the unexpended balance is cancelled and may not be used towards the cost of any other job."

"The treasurer of the company has for his consideration, statements showing the probable requirements in the matter of payments for raw sugar, which is our principal item of raw material, and other statements cover manufacturing costs over long periods.

"As to funds which will be available for the various expenditures to be made, this information he gathers from daily statements of all cash and bank balances, and from statements of bills and accounts receivable with due dates,

together with complete information as to securities owned subject to redemption at nearby dates or available for sale in cash if needed in excess of the ordinary sources of income.

"This company maintains a large amount of its assets in liquid form in order that it may at all times be in position to take advantage of favorable markets for raw materials and supplies."

Very much the same views were expressed by several other officials; they did not, for one reason or another, consider a definite budget for the entire business as feasible, but they used it with respect to certain activities, new construction and advertising particularly.

### **Budgets for Branches**

"Do you apply a budget to each of your branches?"

Three of the four companies which used a definite budget system applied it also to the branches; one did not.

### **Length of Period Covered**

"How long a period do you cover?"

"One year, but revisions are made monthly if any material changes in our sales or production program takes place."

"We do not use the budget system exactly, only in so far as to set a ratio of expense to sales volume for branches. For instance, experience has taught us that a wholesale branch can operate on a certain expense ratio; a branch selling wholesale and retail requires a higher ratio. We set these percentages at the beginning of the year and the actual accomplishment varies very little from these estimates."

"We have before us all the time statements showing amount appropriated for new and re-construction and the first of each month we prepare an estimate showing our probable receipts and disbursements for the month. Our cash statement is made up and corrected daily."

One year appears to be the usual period; one official reported eighteen months.

### **How Prepared**

"What briefly is your method of preparation of budget?"

"Our budgets are prepared on the assumption of a certain volume of materials production and the values are determined from our detailed earning statements of the preceding fiscal period."

## 38    *Internal Financial Management*

"Branch managers initiate the estimate. The engineering department tests these and the administration department pass them through the Board for authorization."

"They are prepared by managers of each department or division under the direction of the controller."

"In the case of new construction or extraordinary repairs or betterment, the matter has to go before our engineering department who draw plans and prepare estimates of the cost of any proposed work and the estimate when finished is sent to our executive committee for action. If approved, an appropriation for the amount of the estimate is authorized and all expenditures charged against that appropriation. When the work is completed, our auditing department is notified, the appropriation closed and the report made as to the result. Some of the appropriations are exceeded and some are under, but we average pretty closely to the amount of the estimate."

"Estimate revenue from production, sales, and other revenues scheduled; estimate expenditures on basis of production and construction scheduled. Specific allowance for other commitments."

### **Revision of Budget**

"Do you carry a 'log' to cover new items arising after the budget was made?"

"In effect, we keep a log of unusual items arising after budget is prepared."

"Applications for additional appropriations must be made."

"The budget is revised to cover new items."

"We are putting into effect a budget plan covering expenditures for additions to plant, which briefly is as follows: An estimate is made of the proposed additions to each plant, which is worked out in detail so far as it is practical to do so, and these estimates are assembled and a budget statement made up for the approval of our executive committee. This budget is, therefore, an estimate for the program of the expansion of the manufacturing properties for the ensuing calendar year. The expenditures are very carefully accounted for, and monthly reports are submitted showing the actual expenditures against the various items in the budget. Additional projects which come up after the budget has been approved, will be authorized on supplement to the original budget, and expenditures accounted for in a similar manner."

### **Accuracy of Estimates**

"About how close have your budgets come to actual?"

"Five per cent."

"Over a period of three years, the budget has been within 3 per cent of actual expenditures."

"Approximately correct where volume of sales and production materialize as estimated."

"Within one or two per cent on items originally included, excepting for construction which is usually about 10 per cent off."

"Our estimates of needs, etc., based on past experiences, are very accurate, although there is an element in our business that no estimates or budgets can foresee, and that is, the crop situation. A large part of our product is, as you know, seasonal and except on a general average, based on years of experience, there is no very definite way of determining results."

### **Lee-Way Allowed?**

"How much deviation is allowed before explanation is expected?"

"Five per cent."

"All abnormal increases or decreases monthly are investigated."

"15 per cent on construction."

"This depends upon many conditions; there is no fixed percentage."

This view that a budget, kept properly flexible, would work out well in practice appeared to be rather more generally held than would be expected, judged merely from the small proportion of the companies stating that they use a definite budget. In other words, "definite budgets" was evidently taken to mean a somewhat rigid plan, which, needless to say, would have its drawbacks in practice.

"It is the personal opinion of the writer," says one of these officials, "that, excepting only in certain comparatively minor particulars, it is neither practical nor wise to undertake to operate a large manufacturing enterprise on the basis requiring a pre-arranged budget or estimate in respect of expenses. But within reasonable limitations, it is practical to establish a percentage figure for factory burdens; although in this particular the volume of gross business, the more or less subtle changing of bases for apportionment of burdens, as well as several other factors, must necessarily be taken into consideration. Moreover, while it is obviously a fact that whenever practical the budget system has very decided advantages, still it needs to be remembered by executive officers that such a system has an adverse effect as to initiative and exercise of the keenest judgment on the part of those of its operating staff to whom the 'yard-stick' is applied."

### **Advantages to be Derived**

"What are some of the advantages you gain by thus estimating future needs?"

"Prepare in advance for our financial needs."

"Progressive current check against actual expenditures and controlling costs."

"Maintenance of cash position; administration of construction program."

"More effective control and resulting economy."

### **Accounting Procedure**

If such estimates were used in making monthly reports of operations and the differences between such estimates and the actual expenses were taken up in the statements for the following month, it would be possible to close the statement earlier.

January could be closed immediately; during February the differences between estimates and actual for January could be worked out and set up as a part of February; then the estimates for February added and February statement closed immediately after the 28th, and so on throughout the year. No month would be actually correct but the result for the year would be very close to facts.

It would seem that a considerable increase in bookkeeping would be required to handle the business in this way. Less labor would be required to compare an estimated schedule with actual results, and the study of differences could be made as thorough in that way as in the other, but statements would be later and the differences brought out would have little effect. They would be carried in working papers, side statements, correspondence, etc.

### **Working Toward More Perfect Methods**

Budgets are used in many cases in public affairs of state, city, town, school boards and similar efforts to estimate a total expense to be authorized and raised by taxes. The totals of such estimates and authorized budgets become the limit beyond which the spenders hesitate to go. Without such estimates the necessary amount to be raised could not be determined and there would be largely increased expenditures, with greater waste and uncertainty of financial condition.

Any accurate budget used in a business corporation or else-

where would have to be built up from careful estimates and frequently changed as experience dictates, until as great accuracy as possible had been attained; but when fairly accurate it would be a financial measure by which to determine efficiency of operation, much as a steam gauge guides the fireman in increasing or reducing his efforts, as the foot or yard rule determines lengths, and as the speedometer shows motor operations, even to assisting the judge to decide what fine to impose on the speeder.

The budget system in operation represents the rule of foresight and sound judgment. Estimates are made through a careful advance study of conditions and these estimates are then checked against actual results. Large variations between estimates and actual figures prove either that the conditions were not intelligently anticipated, that operations have been carelessly conducted, or that the conditions have been unusual and beyond reasonable forecast. While the entire correspondence between estimates and accomplishments can only by a chance be attained, using the budget at all would tend toward increased efficiency.

There is an interesting field open here for careful study to develop accurate budgets, to apply them with a minimum of cost, delay of statements, and of adjustment entries; and to work out methods for quickly examining reasons for differences between budget and actual results. Corporation officials engaged in this work are reducing waste, preventing friction, and thereby, in a most praise-worthy manner, improving the net results of human effort.

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